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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,142	03/26/2002	Leroy Payne	C19248	9736
7590 03/24/2004				
Arthur L Urban HC 50 Box 4045 Red Lodge, MT 59068-9708			EXAMINER YAO, SAMCHUAN CUA	
			ART UNIT 1733	PAPER NUMBER

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/089,142

Applicant(s)

PAYNE, LEROY

Examiner

Sam Chuan C. Yao

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 12-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. attached
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-11, drawn to a method of forming a continuous composite structure. Independent claim 1 requires (for example) the following special technical feature (A): *"encapsulating substantially all of said additive particles with said first liquid resin forming material, advancing said porous blanket through said liquid resin/additive mixture, migrating part of said mixture through said blanket substantially uniformly to form a continuous resin matrix within said blanket with adhesive outer surfaces ... applying a thin coating ... resin forming material over a final base surface".* (emphasis added).

Group II, claim(s) 12-19, drawn to a mobile continuous structure forming apparatus. Independent claim 12 requires (for example) the following special technical feature (B): *"Mobile continuous structure forming apparatus ... including a cantilevered extendable arm assembly pivotally connected with said supporting portion, elongated structure grasping means disposed on said arm assembly, ...".* (emphasis added).

Group III, claim(s) 20, drawn to a continuous composite ditch liner structure. Independent claim 20 requires (for example) the following special technical feature (C): *"A continuous composite ditch liner structure ... an assembly of transversely disposed blanket lengths arranged in an overlapping relationship, each of said blanket lengths including a continuous first resin matrix ..., said resin coating being compatible and reactive with said adhesive first resin forming material, a rock layer over an exposed surface of said thin second resin coating."* (emphasis added).

2. The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Independent claim 1 in Group I requires special technical feature A, but not special technical feature B or C.

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Independent claim 12 in Group II requires special technical feature **B**, but not special technical feature **A** or **C**.

Independent claim 20 in Group III requires special technical feature **C**, but not special technical feature **A** or **B**.

3. During a telephone conversation with Mr. Arthur Urban on 03-19-04 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-11.

Affirmation of this election must be made by applicant in replying to this Office action.

Claims 12-20 are withdrawn from further consideration by the examiner, 37

CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite, because the limitation "*to form a continuous resin matrix within said blanket with adhesive outer surfaces*" (bold face and emphasis added) is confusing. Does this limitation require having a liquid resin/additive mixture migrating and penetrating into a blanket such that, the opposing major surfaces **or** a top surface and side minor surfaces of the blanket are provided with the liquid mixture forming adhesive surfaces? If not, does this limitation require more than one blanket, where each blanket having its top surface being

provided with an adhesive? Moreover, what is taken to be a final base surface. Is it a surface of a substrate (i.e. ditch) where a resultant composite structure is affixed thereto? If so, is the coating step in recited claim 2 an addition to the coating step recited in this claim or merely further defining it? Finally, the phrase "*said coated matrix/blanket*" does not appear to have a positive antecedent basis. For the purpose examining the limitation "*a final base surface*", this phrase is assumed to require a surface of a substrate (i.e. ditch surface) where a resultant matrix impregnated blanket is eventually applied.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Payne (US 5,496,434).

Payne discloses a process of making a continuous composite structure, the process comprises substantially continuously blending particles and a liquid reactive resin forming material to form a uniform mixture, such that the liquid resin substantially encapsulates the particles; advancing a porous blanket (54) through a pool (69) of the uniform mixture; allowing part of the mixture "*to migrate through the blanket to form a cross section*" so as to form a continuous resin rich matrix (78) within the blanket and form an adhesive mixture surface layer (73);

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applying a preformed film (58) onto the adhesive mixture surface layer form a multi-layered web; and, subjecting the multi-layered web pressure to form the continuous composite structure. (col. 3 line 20 to col. 4 line 41; col. 5 lines 3-18; figures 1-7). In figure 3, Payne also teaches providing a bottom film (81) on an underside surface of the multi-layered web. It is unclear how a continuous composite structure of Payne is secured onto a ditch. However, it would have been obvious in the art to at least apply a curable adhesive onto a surface of ditch, because a) Payne teaches using a fast-curing thermosetting polyurethane in forming a composite structure (col. 6 lines 1-16); and, b) it is old in the art to mechanically and/or adhesive secure a liquid impervious liner onto a channel such as a drainage, ditch, pond, pit, canal, etc. The incentives for one in the art for using an a fast curing adhesive would have simply been to obtain self-evident advantages of: not only effectively securing a composite structure on a ditch surface, but also providing an additional a liquid sealant (i.e. adhesive acting as a sealant) layer onto the ditch surface. Moreover, it would have been an obvious expediency in the art to apply pressure on a resultant structure composite which is applied on a surface of a ditch so that, the structure composite not only effectively bond onto an adhesive coated surface of a ditch, but also tightly follow the contours of the surface of the ditch.

With respect to claims 2-7, the limitations in these claims are taken to be old in the art of applying a liquid impervious liner onto a surface of a channel.

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***Allowable Subject Matter***

8. The following is a statement of reasons for the indication of allowable subject matter: there is no suggestion in the art to perform the limitation in claim 8 in the process taught by Payne '434.


9. Claim 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (571) 272-1224. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sam Chuan C. Yao  
Primary Examiner  
Art Unit 1733

Scy  
03-21-04